

**REMARKS**

Claim 12 was rejected under 35 USC 102(b) as being anticipated by, or in the alternative under 35 USC 103 as being obvious over Nicholson et al (US Patent 5,713,979) and Hirakawa et al (US Patent 5,679,125), each taken alone. This ground of rejection is respectfully traversed.

Applicant appreciates the Examiner's comments with respect to distinguishing the "product" in a product by process claim from products taught by the prior art. Claims 12 and 21 define *products* that are different from those found in the prior art.

Claims 12 and 21 have been further amended to recite a particular physical characteristic that distinguishes the product from product found in the prior art. The added product characteristic is a specific range of transmittance of the product is measurable and therefore which can be compared with transmittance characteristics taught by the prior art. Claim 12 specifies that the product has a transmittancy in the range of about 73.4 to 75% and claim 21 specifies that the product has a transmittancy in the range of about 72 to 72.2%.

These product characteristic results from the manufacturing processes (product by process) that are set forth in the claims. Specifically, the manufacturing processes includes steps that are carried out at a specific temperature ranges (added in the previous amendment) and under specified conditions. Neither the specific manufacturing processes nor the product characteristics are taught by the prior art cited.

The claim 12 amendments are supported by the specification as originally filed. According to Figure 3 and the specification at Page 10 lines 4-10, it is taught that the manufacturing technique described in the application yields a synthesized silica glass product having a transmittancy of 75% (Example 1) which is improved by 6.6% when compared to the 68.4% transmittancy of Example 1. Also, the specification at Page 7, lines 2-4 teaches

that the transmittancy of a porous silica glass body is improved by about 5% or more when compared to a conventional one ( $68.4 + 5 = 73.4$ ).

The amendments to claim 21 are also supported by the specification as originally filed. According to Figure 4 and Page 12 lines 6-12 it is disclosed that the transmittancy of a synthesized silica glass of Example 2 is 72.2% which is improved by 5.2% in comparison with the 67% of comparative Example 4 ( $67+5.2 = 72.2$ ). According to the specification at Page 7 lines 2-4 it is disclosed that the transmittancy of the porous silica glass body is improved by about 5% or more compared with a conventional one ( $67+5 = 72$ ).

It is submitted that the product defined by both independent claims distinguishes from the prior art because its physical characteristics are different from the prior art. These physical characteristics result from the manufacturing process called for by the claims. In sum, the independent claims recite physical characteristics and manufacturing methods that are not taught by the prior art. The dependent claims correspond roughly to the limitations found in claims 2-8 of US Patent 6,701,752.

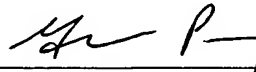
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Respectfully submitted,

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